

DAMAGE ASSESSMENT AND EMERGENCY STATUS REPORT # 9

Monday, June 16, 2008

(Note: This report contains the latest incident information as reported in the statewide "E Team" incident management system for the June 6-8, 2008 severe storms in central and southern Lower Michigan and the June 12-13, 2008 severe storms in central and northern Lower Michigan. Refer to Damage Assessment and Emergency Status Reports #1-8 for synopses of incident-related information for the period June 6-15, 2008.)

SITUATION OVERVIEW: A series of damaging thunderstorms occurred in waves across central and southern Lower Michigan beginning on Friday, June 6 and continuing through the weekend on June 7 and 8, 2008. These storms caused widespread wind and flooding damage. On June 12 and 13, a line of severe storms came across Lake Michigan and caused wind and flooding damage in numerous central and northern Lower Michigan counties. To date, the county and/or municipal emergency management programs that have reported damage and/or impacts via the statewide "E Team" information system for one or both storm systems include:

- Allegan County
- Arenac County
- Barry County
- Clare County
- Clinton County
- Delta Township (Eaton County)
- City of Detroit
- Eaton County
- Genesee County
- Gladwin County
- Lake County
- City of Lansing
- Livingston County
- Manistee County
- Mason County
- Missaukee County
- Monroe County
- Oakland County
- Ogemaw County
- Osceola County
- Ottawa County
- Saginaw County
- Washtenaw County
- Wayne County
- Wexford County

DAMAGE / IMPACT SUMMARIES FOR REPORTING JURISDICTIONS*:

***Note:** these summaries have been copied from the actual E Team Incident or Jurisdiction Situation Reports filed by the respective jurisdictions. Some editing may have occurred to clarify the information or remove extraneous information.

Allegan County:

Nothing new to report.

Arenac County:

Nothing new to report.

Barry County:

Nothing new to report.

Clare County:

Nothing new to report.

Clinton County:

Nothing new to report.

Delta Township (Eaton County):

The Township has requested the following state agency resources to aid in debris removal operations: Two forestry units, two dump trucks, front end loaders, and clam buckets.

City of Detroit:

Nothing new to report.

Eaton County:

Nothing new to report.

Genesee County:

Nothing new to report.

Gladwin County:

Nothing new to report.

Lake County:

On June 16, Lake County officially requested a Governors Declaration for assistance in the repair of the county roadways, and for assistance to private homeowners.

City of Lansing:

The Board of Water and Light (BWL) is reporting that there still remains 36 customers without power and an additional 56 customers needing reconnect but must have contract work completed prior to the BWL being able to complete their work. There are 35 masts down needing repair, 110 identified wires down, two poles that remain down and need replacing, and 50 tree jobs still needing attention. The BWL will have approximately 10 crews working in the field today. The BWL is going to generate a list of customers who are in need of electrical work so that determination can be made about why/how the work will get accomplished. Contact will be made with the customers to figure out the details of what needs to be accomplished. Two situations occurred over the weekend in the City that are primary safety concerns for the Forestry Department. These situations involved impacted trees that had not fallen or had not been identified. A citizen called in the reporting line stating that a tree looked like it was going to fall at any moment on her home. The information was relayed to the Forestry Department who investigated and confirmed that the tree posed an imminent threat to safety. Authorization was given to immediately take the tree down, which was done. Also, reports came of a tree that fell into the roadway on the north end. Forestry investigated and confirmed that a large tree that had been impacted by the storms was covering the roadway, making it impassable. The crews cut up the tree and re-opened the road. There remain thousands of these types of situations in the city and concerns for potential danger remains high. Michigan National Guard crews began debris removal assistance activities in the city on Monday, June 16.

Livingston County:

Nothing new to report.

Manistee County:

Nothing new to report.

Mason County:

The county damage assessment director has begun compiling a list of homes that had visible damage from photos and reports from fire services and law enforcement. It appears that the majority of home / basement flooding will be the result of ground water or back-ups and not surface water flowing in. The Road Commission has begun adding up the estimated costs of the repairs of approximately 100 washout sites and the general road reconditioning. The damage on roads affects approximately 250 miles of public roads in Mason County.

Missaukee County:

Nothing new to report.

Monroe County:

Nothing new to report.

Oakland County:

Nothing new to report.

Ogemaw County:

Nothing new to report.

Osceola County:

On June 12-13, another round of storms came through the area causing severe flooding in Mason, Lake, and northwest portions of Osceola County (Tustin area). Tustin Fire Department reports several road washouts and trees down. Currently, citizens in the Hibma Road / West of 210th avenue are unable to use their only access / egress route.

Ottawa County:

Nothing new to report.

Saginaw County:

Nothing new to report.

Washtenaw County:

Nothing new to report.

Wayne County:

Nothing new to report.

Wexford County:

Wexford County is preparing a local "state of emergency" declaration to be signed by the County Chair. The Village of Harrietta wood box culvert on 30 Road lost end walls and a quarter of the road. The railroad near 30 Road has been closed due to washout. 30-40 culverts of various sizes will need replaced, with estimates for each crossing ranging from \$1,000 to \$200,000. Estimates for repairs to road shoulders and washouts are \$200,000 to \$300,000. Many of the bridges, culverts, and spillways will need rep-rap for scour protection, estimated at \$100,000. The failures on the state highways are significant.

ADDITIONAL INFORMATION:

Power Outages:** The following information was provided by the Detroit Edison (DTE) and Consumers Energy (CE) web sites:

Detroit Edison (storm update, June 15 at 4:22 PM):

About **2,416** customers still are without service, from a total of **400,000** customers who were affected by storms in the past several days. On June 15, another wave of storms began moving through the area, causing additional outages. Damage from these storms is being assessed. Crews are working on the remaining customer outages from the June 6-13 storms. DTE intended to have the June 6-13 storm-related restoration work completed by the evening of June 15.

More than 5,000 power lines were brought down by the series of storms that began last Friday, June 6, affecting about 400,000 customers, making this the 5th-worst storm event in Detroit Edison's 105-year history. Hundreds of poles were broken or damaged and large trees were uprooted in many locations; those trees had to be cut up and removed before repairs could be made to the electric system.

Consumers Energy (last storm update, June 11 at 9:30 PM):

Approximately **1,900** Consumers Energy electric customers are without service due to the numerous thunderstorms that swept across the state this past weekend. Since that time, more than **350,000** customers have been affected by weather-related outages.

The approximate numbers of Consumers Energy electric customers remaining without service in and around the following areas are as follows: Flint (700); Gladwin (30); Lansing (400); Owosso (650) and Temperance (90).

Utility, line clearing and contract crews, including 86 additional crews from Indiana, Kentucky and Ohio, will continue to restore power. The majority of remaining customers without power were expected to be restored by midnight on June 11, although customers in the hardest hit and rural areas, including Flint and Lansing, may not have received electric service until Thursday, June 12. Additional storm activity may extend restoration times. Estimates will be updated as assessment and repairs continue.

****Note: this information changes frequently as repairs are made and/or conditions in the field change. Refer to each company's web site for the most current power restoration status.**

State Response Actions: The State Emergency Operations Center (SEOC) was partially activated on June 13 and remained open during the weekend of June 14-15 to monitor and address recovery issues related to the June 6-8 and June 12-13 storm systems. SEOC operations continue today, Monday, June 16. Agencies present in the SEOC include: Agriculture; Community Health; Environmental Quality; Military and Veterans Affairs; Natural Resources; State Police; Transportation; and the MSP/EMHSD. A FEMA Region V liaison is also present in the SEOC. From the SEOC, state officials will continue to closely monitor the situation and offer whatever assistance they can to meet situational needs. The MSP/EMHSD continues to monitor the situation, coordinate recovery and public information activities, and work closely with the Governor's Office and involved state agencies to provide direct assistance to local jurisdictions to address the most serious public safety and health concerns. Refer to the section of this report below titled "Critical Public Safety / Health Mission Assignments for State Agencies for the Declared Areas" for information on those current areas of emphasis.

Local "State of Emergency" Declared under 1976 PA 390, as amended:

- Eaton County on June 8, 2008.
- City of Lansing on June 8, 2008.
- Ottawa County on June 9, 2008.
- Delta Township (in Eaton County) on June 9, 2008.
- Allegan County on June 10, submitted on June 11, 2008.
- Saginaw County on June 11, 2008.
- Osceola County on June 11, 2008.
- Barry County on June 12, 2008.
- Lake County on June 13, 2008.
- Mason County on June 13, 2008.

Requests by Local Jurisdiction for a Governor's Emergency / Disaster Declaration under 1976 PA 390, as amended:

- Delta Township on June 9, 2008. (No specific request for state resources.)
- City of Lansing on June 10, 2008. (Request for resources included: 1) 15 forestry task force crews with minimum of five personnel each trained in tree removal with necessary equipment; 2) 10 two-person damage assessment field teams; 3) four utility line crews for utility restoration purposes; 4) three dump trucks with personnel; and 5) one end loader with grab bucket, with personnel.)
- Saginaw County on June 11, 2008. (Request for assistance with debris removal and any financial assistance that may be available.)
- Osceola County on June 11, 2008. (Request for assistance with extensive debris removal and with emergency protective measures.)
- Allegan County on June 11, 2008. (Request for: 1) assistance to supplement local response and recovery efforts in rebuilding a roadway which is the primary access for 14 residences; 2) fix and repair culverts and public drains that have been destroyed; and 3) support citizens with flooded homes.)
- Eaton County on June 12, 2008. (Request funding for debris removal; funding or assistance for road repair; and funding for responder overtime costs.)

- Ottawa County on June 13, 2008. (Request for resource and relief assistance necessary to respond to the situation.)
- Lake County on June 16, 2008. (Request funding for the rebuilding of the Lake County road system; public assistance for property owners that were affected).

As indicated in the following section, several of these requests have been addressed. The remaining requests are being evaluated to determine the feasibility of using state agency assets to address the specific public safety and health risks described in the request.

Governor's Declarations under 1976 PA 390, as amended:

On June 13, Governor Granholm signed five separate "state of emergency" proclamations to mobilize direct state resources to assist the following affected local jurisdictions with their most serious health and safety concerns:

- Mason County to provide resources to address the numerous road washouts that occurred in the county due to the June 12-13 storms.
- Allegan County to provide resources to address road washouts that occurred in the county due to the June 6-8 storms.
- Eaton County to provide resources to address road washouts that occurred in the county due to the June 6-8 storms.
- The City of Lansing in Ingham County to provide resources to address lingering, serious public health and safety concerns related to the large volume of vegetative debris remaining within public roadway rights-of-way and on sidewalks and in public alleyways.
- The City of Saginaw in Saginaw County to provide resources to address lingering, serious public health and safety concerns related to the large volume of vegetative debris remaining within public roadway rights-of-way and on sidewalks and in public alleyways.

Critical Public Safety / Health Mission Assignments for State Agencies for the Declared Areas:

On Saturday, June 14, at 8:00 AM, a telephone conference call was held between SEOC staff and representatives of the five jurisdictions included in the Governor's "state of emergency" proclamations referenced above. The purpose of this call was to identify the most critical public safety / health mission assignments for state agencies so that timely direct assistance can be provided to the declared areas. Following is a synopsis of the most critical problems and assistance needs identified in that call:

Declared Jurisdiction	Primary Problems	Type of Assistance Requested	Potentially Responsible State Agency*
Allegan County	<ul style="list-style-type: none"> • Clogged public drains • Road / culvert washouts • Water quality (e-Coli contamination) • Fire protection access • Storm sewer backups in Holland 	<ul style="list-style-type: none"> • Drain inspectors • Technical engineering expertise for road rebuilding • \$ for water quality sampling and lab analysis costs • Technical engineering expertise for design of temporary road for Lakeshore Drive residents 	<ul style="list-style-type: none"> • Dept. of Agriculture (drain inspections) • Dept. of Transportation (technical engineering expertise for road rebuilding) • Dept. of Environmental Quality; Dept. of Community Health (water quality sampling / lab analysis issues)

Critical Public Safety / Health Mission Assignments for State Agencies for the Declared Areas (cont.):

Declared Jurisdiction	Primary Problems	Type of Assistance Requested	Potentially Responsible State Agency*
Lansing, City of	<ul style="list-style-type: none"> Removal of hazardous debris 	<ul style="list-style-type: none"> Debris management task force resources previously requested Trucks for hauling debris 	<ul style="list-style-type: none"> Depts. of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)
Eaton County (incl. Delta Twp.)	<ul style="list-style-type: none"> Removal of hazardous debris Road / culvert washouts in rural areas Burning of destroyed barns / other outbuildings 	<ul style="list-style-type: none"> Trucks for hauling debris Fill / gravel and trucks to assist in repairing roads 	<ul style="list-style-type: none"> Depts. of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel) Dept. of Transportation (fill / gravel; technical assistance) Dept. of Environmental Quality (disaster debris environmental regulation waivers)
Mason County	<ul style="list-style-type: none"> Road / culvert washouts Sewer line break Removal of hazardous debris Public harbor is clogged with debris Damage to uninsured homes Potential dam breach 	<ul style="list-style-type: none"> Equipment to assist in road rebuilding Assistance with access / traffic control Water quality sampling and lab analysis (for surface water and private wells) Removal of hazardous debris Dredging assistance for public harbor Low interest home loans Monitoring of Hamlin Lake Dam overflows / structural integrity 	<ul style="list-style-type: none"> Dept. of Transportation (equipment / personnel for road rebuilding) Dept. of State Police; Dept. of Military and Veterans Affairs (access / traffic control) Dept. of Environmental Quality; Dept. of Community Health (water quality sampling / lab analysis issues) Depts. Of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel) Dept. of Environmental Quality and U.S. Army Corps of Engineers / U.S. Natural Resource Conservation Service (harbor dredging issues) MSP/EMHSD and U.S. Small Business Administration (uninsured home damage) Dept. of Natural Resources; Dept. of Environmental Quality (dam inspection / monitoring)
Saginaw, City of	<ul style="list-style-type: none"> Removal of hazardous debris Clogged public drains 	<ul style="list-style-type: none"> Trucks / equipment / personnel to remove debris (No specific assistance requested re: public drains) 	<ul style="list-style-type: none"> Depts. Of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)

*Note: this is not an actual assignment of responsibilities but rather an identification of potential state agencies that could provide the requested assistance based on their day-to-day mission. Actual assignments will be made through the SEOC based on agency availability, appropriateness for the requested assistance, and other factors.

Organizational Meeting for Implementation of Mission Assignments: On Monday, June 16, at 9:00 AM, a briefing and organizational meeting was held in the SEOC with the involved state agencies to provide the latest incident information and to further define specific mission assignments for work in the five declared areas. Each agency provided an update on its mission-related activities as well as the agency assets that are available for its assigned missions. At 4:00 PM on June 16, a state agency briefing was held in the SEOC to discuss progress made throughout the day. Following are brief synopses of the agency discussions:

- Michigan Dept. of Agriculture:** The MDA intercounty drain inspectors are in contact with the Allegan County Drain Commissioner and will be developing a plan of action for providing state assistance with drain inspection activities. (4:00 PM update: no changes.)
- Michigan Dept. of Corrections:** The MDOC has two work crews (app. 40-50 inmates) on standby to provide debris removal assistance in the City of Lansing and/or City of Saginaw. The MDOC is also identifying department equipment assets that might be used in those debris removal operations. (4:00 PM update: no changes.)

- **Michigan Dept. of Environmental Quality:** The MDEQ dam safety staff inspected both the Hamlin Lake Dam and the Farwell Dam and found them to be structurally sound. They continue to monitor both dams in conjunction with local officials (and in the case of the Hamlin Lake Dam, the Michigan Dept. of Natural Resources). The MDEQ is evaluating assistance options for water sampling and laboratory analysis services in Allegan, Mason, and Ottawa counties. (4:00 PM update: no changes.)
- **Michigan Dept. of Military and Veterans Affairs:** The MDMVA has debris removal work crews and equipment ready to work in the City of Lansing to assist city crews in addressing the debris situations that pose the greatest risk to public safety and health. (4:00 PM update: the MDMVA crews have been working with City of Lansing crews all day, and will continue to do so until the late evening hours.)
- **Michigan Dept. of Natural Resources:** The MDNR was not present at the meeting but continues to monitor conditions at Ludington State Park. In addition, the MDNR will be providing supplemental debris removal assistance to the City of Saginaw. (4:00 PM update: Ludington State Park reopened this afternoon, June 16, with some restrictions for visitors to the park. The MDNR will continue to monitor the Hamlin Lake Dam. MDNR debris removal crews will begin work in the City of Saginaw on the morning of June 17.)
- **Michigan Dept. of State Police:** The MSP will provide assistance with access control in Mason County through this evening. At that point, the MSP forces will be demobilized. (4:00 PM update: the MSP mission will cease at 7:00 PM tonight, June 16.)
- **Michigan Dept. of Transportation:** The MDOT worked with Mason County road crews during the weekend to assist with barricading of washed out roads, and will continue to do so as needed in the coming days. In addition, the MDOT will be providing dump trucks, front end loaders, and other heavy equipment, along with personnel to provide assistance with road repair and rebuilding activities in Mason County. In the City of Saginaw, the MDOT will be providing debris removal assistance on the state trunk lines located within the city limits. In Eaton County, the MDOT is assisting the county road commission with the assessment of damage to washed out roadways and culverts. (4:00 PM update: the US-31 rebuilding project is progressing rapidly. Final paving began today, June 16, and the roadway may be reopened to traffic as early as tomorrow, June 17.)
- **MSP/EMHSD:** The MSP/EMHSD has provided the involved state agencies with a cost tracking spreadsheet and asked that agencies continuously track their incident-related costs. The MSP/EMHSD is also providing additional guidance to the MDOC, MDMVA, and MDOT regarding what constitutes the most serious debris-related public safety and health risks prior to those agencies commencing debris management field work this week. (4:00 PM update: the MSP/EMHSD has addressed a number of media inquiries regarding the status of the storm recovery efforts – including one from the CBS Evening News for storm-related cost and damage figures.)
- **Governor's Office:** At 9:42 AM today, June 16, Governor Granholm signed an Executive Order activating Michigan National Guard assistance for the removal of debris to protect public safety and health in the five declared areas.
- **FEMA / U.S. Army Corp of Engineers:** FEMA and the USACE have been coordinating with Mason County / City of Ludington officials regarding the issue of silt and other debris clogging the Ludington public harbor and possibly impacting navigational capabilities. It has been suggested that a harbor / channel dredging project may be required to fully restore navigational capabilities. The USACE has separate emergency authority to implement such a project, absent a federal emergency / major disaster declaration, if the silt / debris negatively impacts navigation. The USACE will follow up with local officials in the coming days to determine the feasibility for a harbor / dredging project.

The assistance activities listed above will be carried out during the week of June 16-20 (and beyond if necessary).

Storm Related Fatalities

There are six confirmed fatalities resulting from the severe weather on June 6-8, 2008. Three fatalities in Ottawa County, two fatalities in Allegan County, and one fatality in Delta Township (Eaton County). There are two

fatalities confirmed in Argentine Township (Genesee County) on June 9 as a result of carbon monoxide poisoning from a generator located in the home used during an electricity outage.

A vehicle submerged in the Thornapple River in Kent County on June 13 resulted in one fatality. Reports indicate the car went into the river and traveled about 200 yards downstream from where it left the road. There is a strong current in the river due to increased water levels from recent rain.

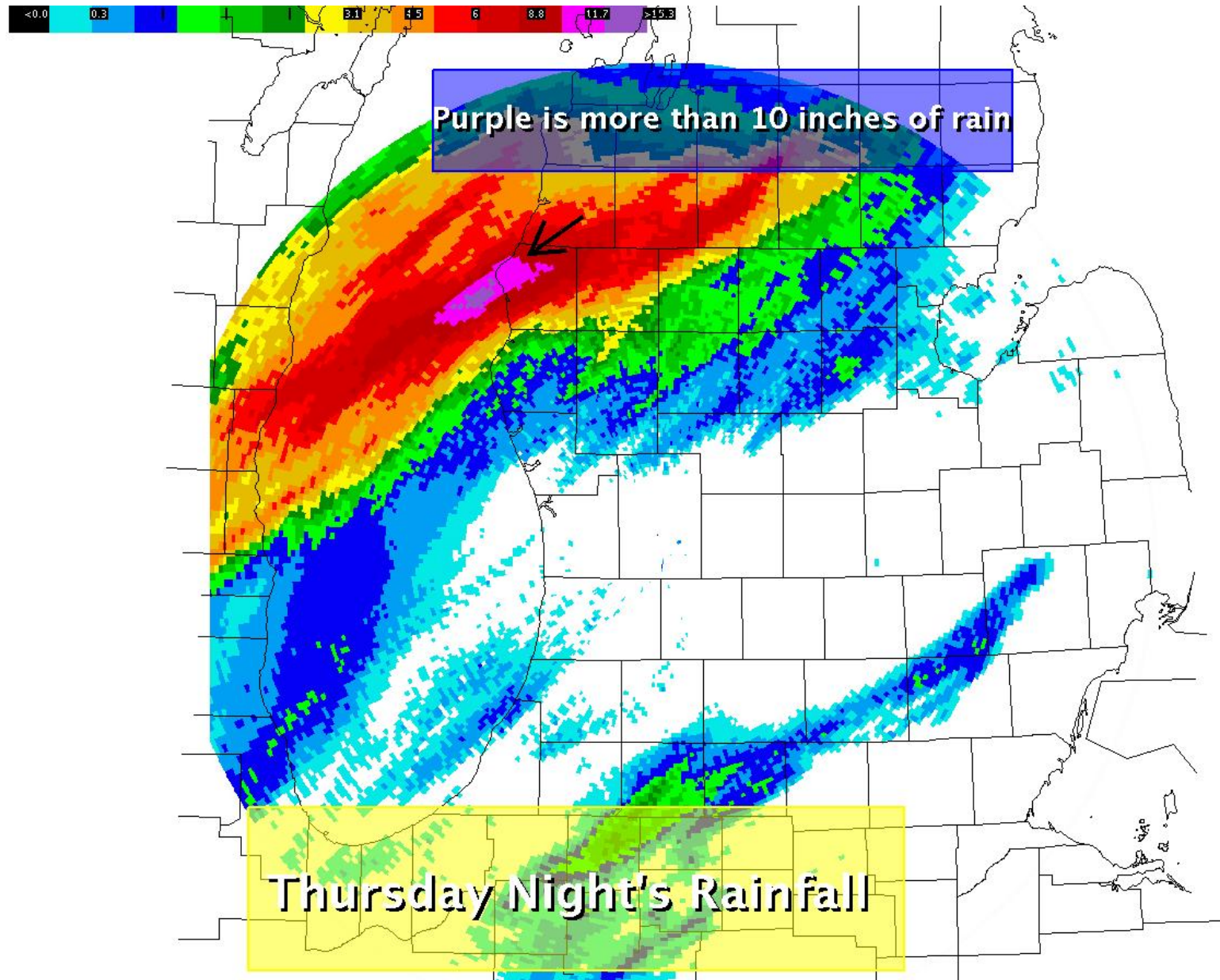
Public Damage Summary Table (from filed E Team reports only): Blank spaces indicate either no damage or damage not yet reported.

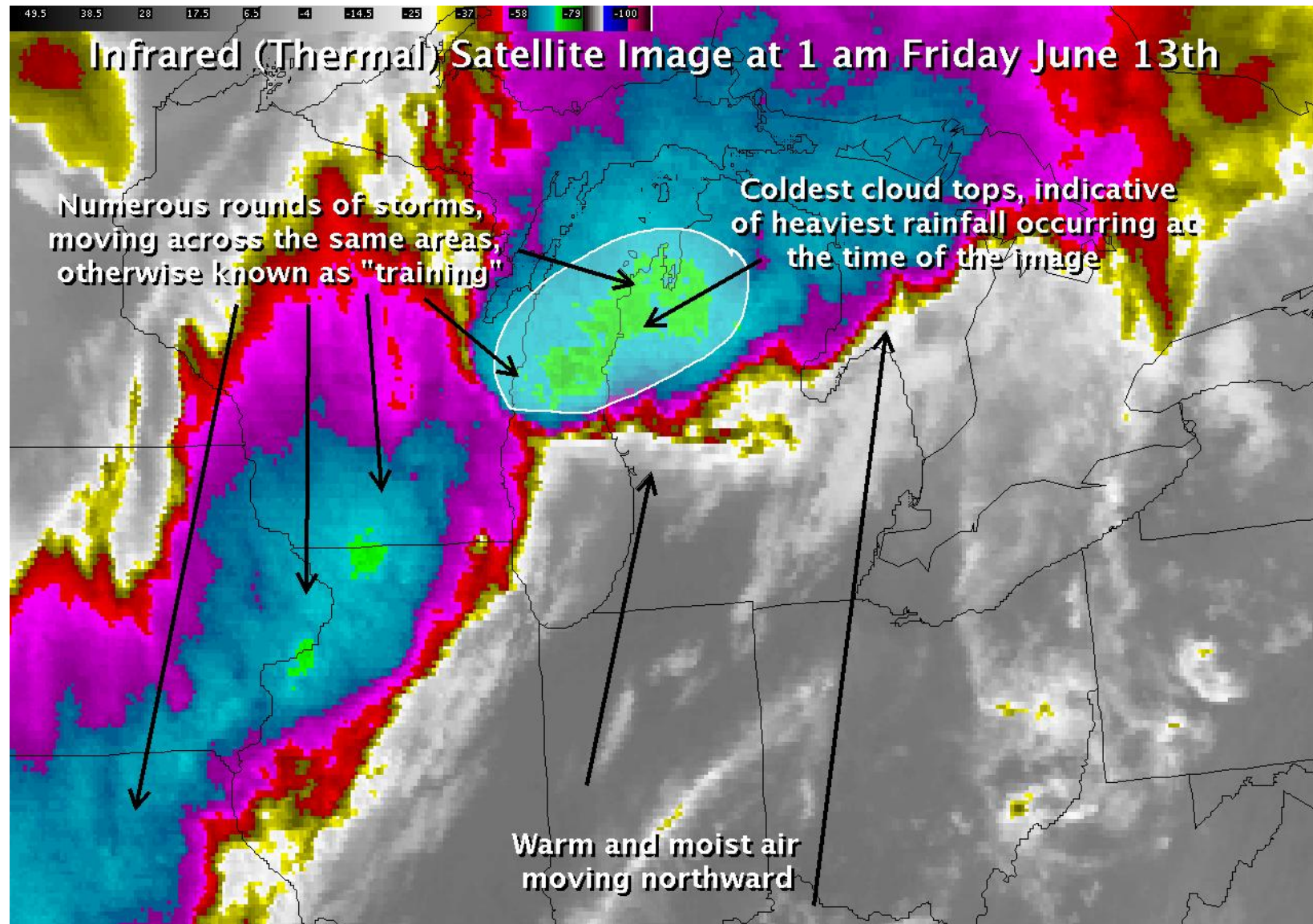
Jurisdiction	Category A: Debris Removal \$	Category B: Emer Prot Measure \$	Category C: Roads / Bridges \$	Category D: Water Control \$	Category E: Public Bldgs \$	Category F: Public Utilities \$	Category G: Parks / Rec and Other \$	\$ Estimate for Damage (per jurisdiction; total = for all jurisdictions)
Allegan County	10,000		690,000	74,600				774,600
Arenac County								
Barry County	250,000		250,000				10,000	510,000
Clare County								
Clinton County	50,000							50,000
Delta Township	97,000	101,500	25,000		2,500			226,000
City of Detroit								
Eaton County	200,000	70,000	300,000					570,000
Genesee County								
Gladwin County								
Lake County			400,000					400,000
City of Lansing	1,500,000					10,000,000	500,000	12,000,000
Livingston County								
Manistee County								
Mason County			3,230,000					3,230,000
Missaukee County								
Monroe County								
Oakland County								
Ogemaw County								
Osceola County	9,680	71,829						81,509
Ottawa County		290,000	357,000	418,000	7,400	262,100		1,334,500
Saginaw County	305,000							305,000
Washtenaw County								
Wayne County								
Wexford County								
TOTALS PER CATEGORY:	2,416,680	533,329	5,252,000	492,600	9,900	10,262,100	510,000	19,481,609

Private Damage Summary Table (from filed E Team reports only): Blank spaces indicate either no damage or damage not yet reported.

Jurisdiction	Residences Destroyed	Residences – Major Damage	Residences – Minor Damage	Residences – Affected	Businesses Destroyed	Businesses – Major Damage	Businesses – Minor Damage	Businesses – Affected	\$ Estimate for Damage (if available)
Allegan County		1	17	45					(5% insured)
Arenac County									
Barry County		1	19						\$180,000 (75% insured)
Clare County			7						\$10,000 (100% insured)
Clinton County	1	2	15	5			1	5	\$510,000 (100% insured)
Delta Township		1	125	300		1	5	25	\$1,300,000 (95-100% insured)
City of Detroit									
Eaton County			40	9			1		\$449,000 (100% insured)
Genesee County		1		2					(100% insured)
Gladwin County									
Lake County									
City of Lansing		9	51	285		1	1	20	\$550,000 (70% insured – residences; 100% insured – businesses)
Livingston County									
Mason County			20						\$90,000
Missaukee County									
Monroe County									
Oakland County									
Ogemaw County			1	1					(100% insured)
Osceola County			15	130			3		
Ottawa County		2	12	135			7	3	\$1,415,000 (5% insured)
Saginaw County		8	5	16		1	1	2	(60% insured – residences; \$200,000 for businesses – 80% insured)
Washtenaw County									
Wayne County									
Wexford County									
TOTALS:	1	25	327	928		3	19	55	\$4,704,200

National Weather Service Rainfall Map for June 12-13 Storm





Enlarged National Weather Service Rainfall Map for June 12-13 Storm

